

**Abstract**

A system (400) for classifying an input image into one of a plurality of output classes includes a plurality of pattern recognition classifiers (420, 422, 424). Each of the plurality of pattern recognition classifiers determines a candidate output class and at least one rejected output class for the input image from an associated subset of the plurality of output classes. Each classifier generates a confidence value associated with the classifier based on the determination. An arbitrator (430) selects a classifier having the best associated confidence value and eliminates the at least one rejected class determined at the selected classifier from consideration as the associated class for the input image.